GREEN RIVER ACTION PLAN: YAMPA AND LITTLE SNAKE RIVERS

| | ACTIVITY | WHO | STATUS | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | OUT- |
|---------------|--|--------------------|------------------|------------|------------|------------|------------|------------|------------|----------|
| | | | | 10/02-9/03 | 10/03-9/04 | 10/04-9/05 | 10/05-9/06 | 10/06-9/07 | 10/07-9/08 | YEARS |
| l. | PROVIDE AND PROTECT INSTREAM FLOWS (HABITAT MANAGEMENT) | | | | | | | | | |
| I.A. | Basin-wide activities | | | | | | | | | |
| I.A.1. | Identify fish habitat and flow needs | | | | | | | | | |
| I.A.1.a. | Complete Phase II feasibility study. | CRWCD/ CWCB/BR | Complete | | | | | | | |
| I.A.1.b. | Revise and update estimates of basin water needs. | CRWCD/FWS | Complete | | | | | | | |
| I.A.1.c. | Evaluate and recommend low flow and passage needs (also relates to restoration of fish | CDOW/FWS/ | Complete | | | | | | | |
| | passage, if needed Recovery Element II). | CRWCD | | | | | | | | |
| I.A.1.d. | Provide hydrology support to develop and evaluate flow augmentation alternatives. | CWCB | Ongoing | Х | | | | | | |
| I.A.1.e. | Report synthesizing the results of water demand, low flow recommendations and hydrologic analyses. | FWS | Complete | | | | | | | |
| I.A.1.f. | Install, operate, and/or maintain stream flow and sediment monitoring gages. | FWS | Ongoing | Χ | Χ | Χ | Χ | Χ | X | Х |
| I.A.2. | Develop and implement Yampa River management plan. | | | | | | | | | |
| I.A.2.a. | Negotiate a Cooperative agreement to implement the Yampa River management plan. | Program | | Χ | | | | | | |
| I.A.2.a.(1 | Develop a biological assessment for the management plan; initiate intra-Service Section 7 | FWS | | Х | | | | | | |
| 1.A.Z.a.(| consultation based on the Service intent to enter into the Cooperative Agreement. | FVVO | | ^ | | | | | <u> </u> | <u> </u> |
| I.A.2.a.(1 | Complete intra-Service consultation, resulting in a programmatic biological opinion (PBO) for the Yampa Basin. | FWS | | Х | | | | | | |
| I.A.2.a.(2 | · | FWS | | Х | | | | | | |
| | , ramming the management plant | FWS/Program/ | | , | | | | | | |
| I.A.2.b. | Sign Cooperative Agreement to implement the management plan. | Colorado/ CRWCD | | Х | | | | | | |
| I.A.3. | Develop public involvement plan. | FWS/CDOW | Complete | | | | | | | |
| I.A.3.a | Implement public involvement plan. | FWS/CDOW | Ongoing | Х | Х | Х | | | | |
| I.A.4. | Evaluate and revise as needed flow regimes to benefit endangered fish populations. | FWS/Program | Ongoing | Х | Χ | Х | Х | Х | Х | Х |
| I.B. | Yampa River above the Little Snake River | | | | | | | | | |
| I.B.1 | Initially identify year-round flows needed for recovery. | FWS-FR | Complete | | | | | | | |
| I.B.2 | Provide augmentation of low flows. | | | | | | | | | |
| I.B.2.a | Identify and acquire water source(s). | | | | | | | | | |
| I.B.2.a.(1 | Steamboat Lake. | | | | | | | | | |
| I.B.2.a.(1 | I)(a Change decree (litigation dependent). | CDPOR | Complete 5/97 | | | | | | | |
| >* I.B.2.a.(1 | Lease up to 2,000 af. to augment late summer flows. (Future use of Steamboat Lake Water to be determined.) | FWS-WR | Ongoing | Х | Х | Х | Х | Х | Х | Х |
| I.B.2.a.(1 | 1)(c Quantify transit losses. | CWCB | Complete | | | | | | | |
| | Identify and evaluate water supply alternatives for up to 7 000 at of stream flow | | | | | | | | | |
| I.B.2.a.(2 | augmentation. | Program | | Х | | | | | 1 | İ |
| I.B.2.a.(2 | Complete all necessary administrative, legal, environmental compliace, institutional and financial arrangements needed for development of augmentation water supply source(s). | Program | | | Х | | | | | |
| >* I.B.2.a.(2 | () | Program | | | | X | Х | Х | Х | Х |
| I.B.3. | Evaluate need for instream flow water rights. | i iogiaili | | | | ^ | ^ | ^ | | |
| I.B.3.a | Review scientific basis. | CWCB/CDOW | Complete | | | | | | | |
| I.B.3.a | Assess legal and physical availability of water. | CWCB/CDOW CWCB | Complete | | | | | | | |
| I.B.3.0 | Assess regar and physical availability of water. Assess compact considerations. | CWCB | Complete | | | | | | | |
| I.B.3.d | Five-year periodic review of progress under the PBO to determine if instream flow filings are | CWCB/FWS | Complete | | | | | | Х | Х |
| | necessary. | | | | | | | | | |
| I.B.3.d.(1 | | CWCB | | | | | | | Х | Х |
| I.C. | <u>Little Snake River (Colorado and Wyoming)</u> | | | | | | | | | |
| | Evaluate importance of Little Snake to endangered fishes and develop management action | BR/LFL | Complete | | | | | | | |
| I.C.1. | plan. (Determine if habitat exists to protect under Colorado's instream flow program.) | DIVELL | Complete | | | | | | | |

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|--------------|---|---------------------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| | ACTIVITY | WHO | STATUS | FY 03 10/02-9/03 | FY 04 10/03-9/04 | FY 05 10/04-9/05 | FY 06 10/05-9/06 | FY 07 10/06-9/07 | FY 08 10/07-9/08 | OUT- YEARS |
| I.C.2.a. | Develop work plan. | BR/LFL | Complete | | | | | | | |
| I.C.2.b. | Identify flows. | FWS-WR | | 6/03 | | | | | | |
| I.C.3. | Evaluate need for instream flow water rights. | | | | | | | | | |
| I.C.3.a. | Review scientific basis. | CWCB/CDOW | Complete | | | | | | | |
| I.C.3.b. | Assess legal and physical availability of water. | CWCB | Complete | | | | | | | |
| I.C.3.c. | Assess compact considerations. | CWCB | Complete | | | | | | | |
| I.C.3.d. | Five-year periodic review of progress under the PBO to determine if instream flow filings are necessary. | CWCB/FWS Wyoming | | | | | | | Х | Х |
| I.C.3.d.(1) | If necessary, evaluate how identified flows will be legally protected. | CWCB/ Wyoming | | | | | | | Х | Х |
| I.C.4. | Assess Wyoming's current and future water needs. | Wyoming | Complete | | | | | | | |
| I.D. | Yampa River below Little Snake River | Tryoning | Complete | | | | | | | |
| I.D.1. | Initially identify year-round flows needed for recovery. | FWS-FR | Complete | | | | | | | |
| I.D.1.a. | Modify based on revisions to environmental baseline. | FWS-WR | Complete | | | | | | | |
| I.D.1.b. | Update flow recommendations to include flows from the Little Snake River. | FWS | Complete | 6/03 | | | | | | |
| I.D.2. | Evaluate need for instream flow water rights. | 1 1/10 | | 0/03 | | | | | | |
| I.D.2.a. | Review scientific basis. | CWCB/CDOW | Complete | | | | | | | |
| I.D.2.b. | Assess legal and physical availability of water. | CWCB | Complete | | | | | | | |
| I.D.2.c. | Assess compact considerations. | CWCB | Complete | | | | | | | |
| 1.D.2.0. | Five-year periodic review of progress under the PBO to determine if instream flow filings are | | Complete | | | | | | | |
| I.D.2.d. | necessary. | CWCB/FWS | | | | | | | Х | Х |
| I.D.2.d.(1) | If necessary, evaluate how identified flows will be legally protected. | CWCB | | | | | | | Х | Χ |
| II. | RESTORE HABITAT (HABITAT DEVELOPMENT AND MAINTENANCE) | | | | | | | | | |
| II.A. | Yampa River from Dinosaur National Monument to Craig, Colorado | | | | | | | | | |
| II.A.1. | Restore native fish passage at instream barriers and reduce impacts of maintaining diversion | | | | | | | | | |
| II.A. I. | structures. | | | | | | | | | |
| II.A.1.a. | Inventory potential barriers. | CRWCD | Complete | | | | | | | |
| II.A.1.b. | Determine threshold (passage) flows between Craig and Dinosaur National Monument (low-flow dependent). | CDOW/FWS | Complete | | | | | | | |
| II.A.1.c. | Develop guidelines to facilitate fish passage at new diversion structures. | PD/FWS-ES | | 3/03 | | | | | | |
| II.A.2. | Reduce/eliminate entrainment of Colorado pikeminnow at diversion structures. | | | | | | | | | |
| II.A.2.a. | Identify and evaluate existing diversion structures for entrainment of Colorado pikeminnow | PD/FWS-ES | Ongoing | Х | Х | Х | Х | Х | Х | Х |
| | Develop and implement remedial measures, as necessary, to reduce or eliminate | PD/CDOW/ | | | | | | | | |
| >* II.A.2.b. | entrainment. | FWS | Ongoing | | Х | Х | Х | Х | Х | Х |
| II.A.2.c. | Develop guidelines to reduce or eliminate entrainment at new diversion structures, if necessary. | PD/CDOW/ FWS | | Х | | | | | | İ |
| II.A.3. | Review NPS/USGS report to assess potential for negative impacts of elevated pH to endangered fish. | Program | | Х | | | | | | |
| II.B. | Green River from Ouray to Jensen, Utah (see Green River Action Plan) | | | | | | | | | |
| II.B.1 | Acquire interest in high-priority flooded bottomland habitats between Ouray NWR and Jensen to benefit endangered fish (see Green River Action Plan: Mainstem II.A.2.) | | | | | | | | | |
| II.B.2. | Implement levee removal strategy at high-priority sites (see Green River Action Plan : | | | | | | | | | |
| III. | Mainstem II.A.3.). REDUCE NEGATIVE IMPACTS OF NONNATIVE FISHES AND SPORTFISH MANAGEMENT ACTIVITIES (NONNATIVE AND SPORTFISH MANAGEMENT) | | | | | | | | | |
| | Develop aquatic management plan (Colorado) to reduce nonnative fish impacts while providing | | | | | | | | | |
| III.A. | sportfishing opportunities (also relates to nonnative fish management/control Recovery | CDOW | Complete | | | | | | | |
| | | | | | | | | | | |
| × III ∧ 4 | Implement Yampa Basin aquatic wildlife management plan to develop nonnative fish control programs in reaches of the Yampa River occupied by the endangered fishes. Each control | CDOW | Ongoing | ~ | х | X | X | X | | |
| >* III.A.1. | activity will be evaluated for effectiveness and then continued as needed. | CDOW | Ongoing | Х | _ ^ | ^ | _ ^ | ^ | Х | Х |
| III.A.1.a. | Identify potential conflicts between present fisheries management in existing Elkhead | CDOW | Complete | | | | | | | |
| | Reservoir and endangered fishes and formulate alternative management plan. | 050 | Complete | | | | | | | |

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|----|---------------|--|--------------------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| * | III.A.1.a.(1) | Evaluate nonnative fish escapement and control options at Elkhead Reservoir (during and after Elkhead expansion construction). | FWS-FR/ CDOW | | Х | Х | Х | | | | |
| >* | III.A.1.a.(2) | Implement control measures as needed to control escapement (during and after Elkhead expansion construction). | | | | | | Х | Х | Х | Х |
| | III.A.1.b. | Control northern pike | | | | | | | | | |
| >* | III.A.1.b.(1) | Remove and translocate northern pike and other sportfishes from Yampa River. | CDOW/FWS | Ongoing | Х | | | | | | |
| | III.A.1.b.(2) | Reduce northern pike reproduction in the Yampa River. | | | | | | | | | |
| | III.A.1.b.(2) | Identify and evaluate natural and artificial spawning/nursery habitats for northern pike in the Yampa River for exclusion devices. | CDOW | | Х | | | | | | |
| >* | III.A.1.b.(2) | Implement remedial measures to reduce pike reproduction in Yampa River. | CDOW | | Х | Х | | | | | |
| | III.A.1.b.(2) | Develop guidelines for new structures to minimize creation of habitat suitable for pike spawning/nursery. | CDOW | | Х | | | | | | 1 |
| | III.A.1.c. | Control channel catfish | | | | | | | | | |
| >* | III.A.1.c.(1) | Remove channel catfish in Yampa Canyon. | FWS | Ongoing | Х | Х | | | | | |
| >* | III.A.1.c.(2) | Remove and translocate channel catfish above Yampa Canyon. | CDOW | | Х | Х | | | | | - |
| >* | III.A.1.d. | Remove and translocate smallmouth bass. | CDOW | | Х | Х | Х | | | | |
| | III.A.1.e. | Remove bag and possession limits on warmwater nonnative sportfishes within critical habitat in Colorado. | CDOW | Complete | | | | | | | |
| | IV. | MANAGE GENETIC INTEGRITY AND AUGMENT OR RESTORE POPULATIONS (STOCKING ENDANGERED FISHES) | | | | | | | | | |
| | IV.A. | Yampa River in Dinosaur National Monument | | | | | | | | | |
| | IV.A.1. | Augment or restore populations as needed, and as guided by the Genetics Mgmt. Plan. | | | | | | | | | |
| | IV.A.1.a. | Develop State stocking plan for bonytail in the Yampa River. | CDOW | Complete | | | | | | | |
| > | IV.A.1.a.(1) | Implement stocking plan. | FWS/CDOW | Ongoing | Х | Х | Х | Х | Х | | Х |
| | IV.A.1.b. | Evaluate stocking success as identified in monitoring plan for stocked fish. | LFL/FWS/ States | | Х | Х | Х | Х | Х | | Х |
| | v. | MONITOR POPULATIONS AND HABITAT AND CONDUCT RESEARCH TO SUPPORT RECOVERY ACTIONS (RESEARCH, MONITORING, AND DATA MANAGEMENT) | | | | | | | | | |
| | V.A. | Conduct population estimate for humpback chub. | FWS | | Х | Х | | | Х | Х | Х |